

# **Daqstation DX1000/DX1000N/ DX2000 and DAQSTANDARD Functional Changes Resulting from the Updating**

(Applies to DX1000/DX1000N/DX2000 with hardware style 2 or later and firmware release 2 or later as well as DAQSTANDARD version 7.21 or later)

**vigilantplant.**



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Thank you for purchasing the Daqstation DX1000/DX1000N/DX2000 (DX). This manual covers functions that has been changed in hardware style 2 and firmware release 2 or later. It also covers functions that have been changed on DAQSTANDARD version 7.21 or later. Change the contents of the following manuals with the contents of this manual.

#### **Manuals Provided on the CD-ROM**

<b>Manual Title</b>	<b>Manual No.</b>	<b>Description</b>
Daqstation DX1000/DX1000N User's Manual	IM 04L41B01-01E	See this manual for the descriptions of the DX1000/DX1000N operations.
Daqstation DX2000 User's Manual	IM 04L42B01-01E	See this manual for the descriptions of the DX2000 operations.
Daqstation DX1000/DX1000N/DX2000 Communication Interface User's Manual	IM 04L41B01-17E	See this manual for the descriptions of communication commands.
DXA120 DAQSTANDARD for DXAdvanced User's Manual	IM 04L41B01-61E	See this manual for the descriptions of the DAQSTANDARD operations.

#### **Paper Manuals**

<b>Manual Title</b>	<b>Manual No.</b>	<b>Description</b>
Daqstation DX1000/DX1000N Operation Guide	IM 04L41B01-02E	Explains the basic operations of the DX1000/DX1000N.
Daqstation DX2000 Operation Guide	IM 04L42B01-02E	Explains the basic operations of the DX2000.

# Overview of the Functional Changes

Below is an overview of the main functional changes.

- **Improvement to the Operability on the Historical Trend Display**  
When changing to the all data display, the DX loads as much of the continuous data as the display memory can hold and shows the data.
- **Alarm Output Relay Action When the Alarm ACK Operation Is Executed**  
You can select the mode in which the alarm output relay is turned OFF when alarm ACK is executed and remains OFF until the next alarm occurs.
- **Addition of the Media FIFO Function**  
If not enough free space is available when saving a new data file to the CF card, files are deleted in order from the oldest data update date/time to save the new file.
- **Function That Automatically Assigns MW100s to Modbus Clients**  
When connecting MW100s to the DX using the Modbus/TCP communications, the MW100 channels can be assigned automatically to the DX external input channels.  
\* Only on DX2000s with the external input channels (/MC1 option).
- **NEMA4 Compliance (Only the Waterproof Construction)**  
The waterproof construction of the DX front panel complies with the NEMA4 standard.

## Checking the Style Number and Release Number on the Name Plate

As shown below, the style number and release number are marked on the name plate attached to the DX.

MODEL		STYLE	
		H	S
		2	2
SUFFIX			
SUPPLY			
FREQUENCY			
NO.			

Firmware release number

Hardware style number

# Operations on the DX1000/DX1000N/DX2000

Below are the operational changes as a result of the functional changes. This section mainly uses the DX1000 display in the explanations.

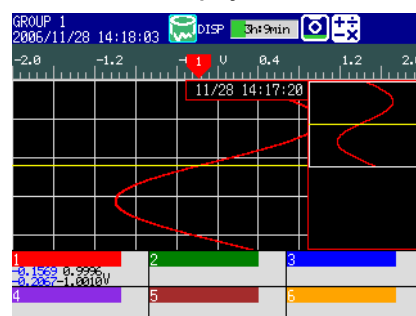
## Improvement to the Operability on the Historical Trend Display

### Loading Operation of Continuous Data to the Display Memory

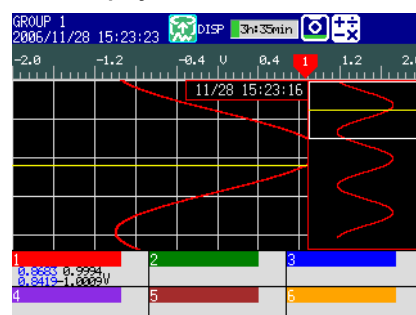
#### All Data Display

When all data display is enabled, as much of the past measured data that are continuous to the measured data shown on the screen at that point as the display memory can hold are loaded. This allows you to view the past measured data without having to load the data for each screen.

#### • Conventional Display Method



#### • New Display Method



▶ Section 4.3, "Displaying Past Measured Data (Historical Trend Display)" in the user's manual

## Displaying the Data in the Grid Time of the Trend Display

If the trend update interval is set to **1h/div** or higher, the month, day, and hour at the grid position are displayed on the screen. The display format can be changed by setting the date format.

Date Format	Display Format of the Grid Time	Display Example
Year/Month/Day	MM/DD hh	12/31 08
Month/Day/Year	MM/DD hh	12/31 08
Day/Month/Year	DD/MM hh	31/12 08
Day.Month.Year	DD.MM hh	31.12 08

▶ Section 2.4, "Setting the Date Format" in the user's manual

## Improvement to the Display Group Setup Operation

The channel settings of a display group can be copied to another group.

### Setup Screen

Press **MENU** (switch to the setting mode) and select **Group set, Trip line**

### Procedure

1. Select the copy source channel settings.
2. Press the **Copy** soft key.
3. Select the copy destination channel settings.
4. Press the **Paste** soft key. The channel settings are copied.

▶ Section 5.1, "Setting Display Groups" in the user's manual

## Specifying the Base Position of the Bar Graph

The base position of the bar graph can be set to span lower limit (scale lower limit) or span upper limit (scale upper limit). The setting is applied when displaying the bar graph and when displaying the current value on the scale using the bar graph.

### Setup Screen

Press **MENU** (switch to the setting mode) and select **Meas channel > Bar Graph**

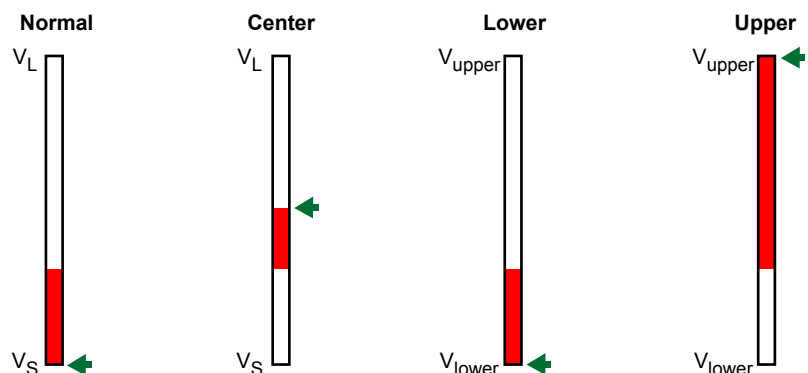
### Setup Items

- Bar graph > Base position

Set the base position of the bar graphs to **Normal**, **Center**, **Lower**, or **Upper**. The bar graphs for the different settings are shown below.

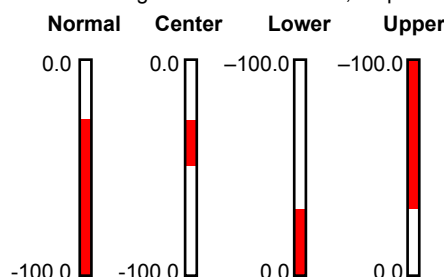
#### When the Display Direction of the Bar Graph Is Vertical

- Normal
  - Value at the bottom of the bar graph: Span lower limit or span upper limit (or scale lower limit or scale upper limit), whichever is less
  - Value at the top of the bar graph: Span lower limit or span upper limit (or scale lower limit or scale upper limit), whichever is greater
  - Starting point of the bar: Bottom edge
- Center
  - Value at the bottom of the bar graph: Same as with **Normal**.
  - Value at the top of the bar graph: Same as with **Normal**.
  - Starting point of the bar: Center
- Lower
  - Value at the bottom of the bar graph: Span lower limit (or scale lower limit)
  - Value at the top of the bar graph: Span upper limit (or scale upper limit)
  - Starting point of the bar: Bottom edge
- Upper
  - Value at the bottom of the bar graph: Same as with **Lower**.
  - Value at the top of the bar graph: Same as with **Lower**.
  - Starting point of the bar: Top edge



$V_{upper}$ : Span upper limit (or scale upper limit)  
 $V_{lower}$ : Span lower limit (or scale lower limit)  
 $V_L$ : Vlower or Vupper, whichever is greater  
 $V_S$ : Vlower or Vupper, whichever is less  
 ←: Starting point of the bar

Example: When the span lower and upper limits of the input range are 0.0 and -100.0, respectively

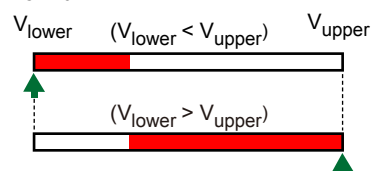


### When the Display Direction of the Bar Graph Is Horizontal

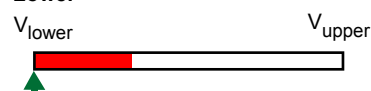
The span lower limit (or scale lower limit) becomes the left edge of the bar graph, and the span upper limit (or scale upper limit) becomes the right edge of the bar graph.

- Starting point of the bar
  - Normal: Left edge or right edge, whichever is less
  - Center: Center
  - Lower: Left edge
  - Upper: Right edge

#### Normal



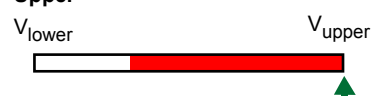
#### Lower



#### Center

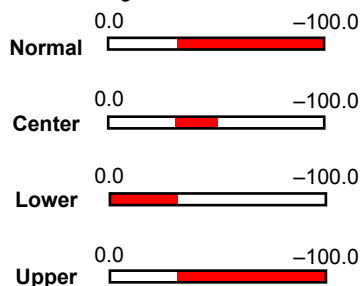


#### Upper

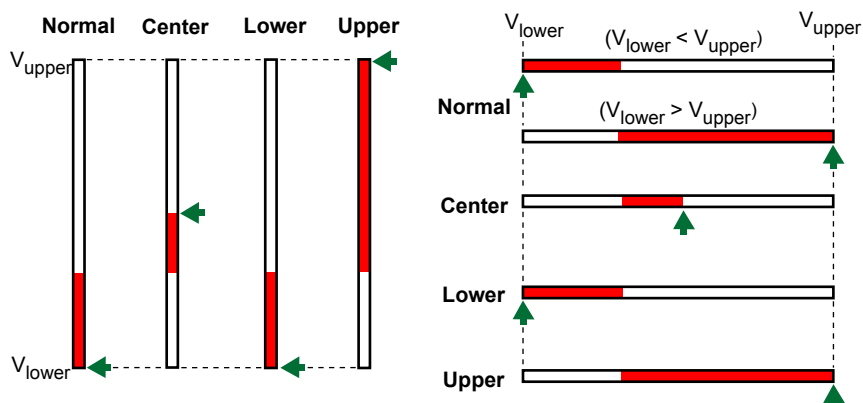


$V_{upper}$ : Span upper limit (or scale upper limit)  
 $V_{lower}$ : Span lower limit (or scale lower limit)  
: Starting point of the bar

Example: When the span lower and upper limits of the input range are 0.0 and -100.0, respectively



### When Displaying the Current Value on the Scale Using the Bar Graph



- ▶ Section 5.11, "Changing the Bar Graph Display Method" in the user's manual
- ▶ Operation using communication commands: Page 19



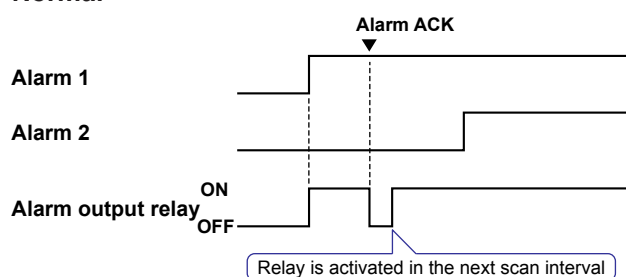
## Alarm Output Relay Action When the Alarm ACK Operation Is Executed

You can select the relay output status that is enabled after the alarm ACK operation from the following two settings.

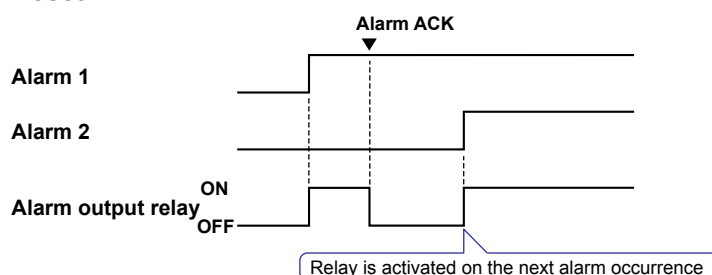
- **Normal:** The relay output is deactivated when the alarm ACK operation is executed. If the condition for activating the alarm output relay is met in the next scan interval, the relay output is activated. This operation is valid only when the alarm output relay is set to **Hold**.
- **Reset:** The relay output is deactivated when the alarm ACK operation is executed. If a new condition for activating the alarm output relay is met, the relay is activated.

An example of the relay action when alarm ACK is executed is shown below. This example is for the case when the output relay **AND** item is set to **OR** and the Hold item is set to **Hold**.

### • Normal



### • Reset



## Setup Screen

Press **MENU** (switch to the setting mode), hold down **FUNC** for 3 s (switch to the basic setting mode), select **Alarm > Switch, Relay**

Basic Setting Mode		Ethernet Link
Internal Switch		
AND	None	
Relay		
AND	None	
Action	Energize	
Hold	Nonhold	
Relay Action on ACK	Normal	

Normal | Reset

## Setup Items

Relay > Relay Action on Ack

Select **Normal** or **Reset**.

- ▶ Section 3.5, "Setting the Auxiliary Alarm Function" in the user's manual
- ▶ Section 3.8, "Releasing the Alarm Output (Alarm ACK Operation)" in the user's manual
- ▶ Operation using communication commands: Page 20

## Resetting the Computed Value during Computation (/M1 and /PM1 Options)

You can reset the computed value not only when the computation is stopped but also when the computation is in progress.

- ▶ Section 9.4, “Starting/Stopping Computation, Resetting Computation, and Releasing Computation Data Dropout Display” in the user’s manual

## Changes to How the Data Files Are Named

The table below shows the file name that is assigned when the measured data is saved to the CF card.

Differences from the File Names up to Now

- The “ID” item at the end of the file name is deleted and its functionality is included in the “Separator” of the 7-digit sequence.
- The sequence section of the display data and event data file names is changed to 7 digits, and the “ID” function is included in the “Separator” when using the “Batch name.”

Structure	Description	
Date	Display data Event data Manual sampled data Snapshot data	<div>7-digit Specified string Date Extension</div> Ex.: 000123_AAAAAAAAAA050928_174633.DAD
	Report data	<div>7-digit Specified string Date Type Extension</div> Ex.: 000123_AAAAAAAAAA050928_174633HD.DAR
Sequence	Display data Event data Manual sampled data Snapshot data	<div>7-digit Specified string Extension</div> Ex.: 000123_AAAAAAAAAA.DAD
	Report data	<div>7-digit Specified string Type Extension</div> Ex.: 000123_AAAAAAAAAA0HD.DAR
Batch name	Display data Event data	<div>7-digit Batch name Extension</div> Ex.: 000123_BBBBBBBBBBBBBBBBBBBB.DAD
	Report data	<div>7-digit Date Type Extension</div> Ex.: 000123_050928_174633HD.DAR
	Manual sampled data Snapshot data	<div>7-digit Date Extension</div> Ex.: 000123_050928_174633.DAM

Item	Description	
7-digit sequence	000001~999999	Consists of a 6-digit number and a separator. The number is assigned in order of occurrence. When the 6-digit number reaches 999999, it returns to 000000. The separator starts with an underscore followed by a character that changes in the following order: A to Z and then 0 to 9.
Date	YYMMDD_HHMiSS	YY: Year (lower two digits), MM: Month, DD: Day HH: Hour, Mi: Minute, SS: Second
Specified string	AAAAAAAAA***A	Up to 16 alphanumeric characters can be used
Batch name	BBBBBBBBBBB***B	Up to 40 alphanumeric characters can be used
Type	H_, D_, W_, M_, HD, DW, DM	Report data type H_: Hourly, D_: Daily, W_: Weekly, M_: Monthly, HD: Hourly and daily, DW: Daily and weekly, DM: Daily and monthly
Extension	Display data Event data Manual sampled data	:DAD :DAE :DAM
	Report data Snapshot data Setup data	:DAR :PNG :PDL

## Sorting the Files by the Update Date/Time

The files can be sorted in order by the update date/time in the screens below. This function allows you to easily locate the files you need.

- File list/delete
- Load display data
- Load event data
- Load settings (setting mode)
- Load settings (basic setting mode)

### Procedure

The procedure is explained using the "File list/delete" screen of the CF card as an example.

1. Press **MENU** (switch to the setting mode) and select **Save/Load > File list/delete > CF soft key\* > DISP/ENTER**

\* When a CF card and a USB flash memory (/USB1 option) are being used

2. Press the **Sort** soft key to sort the files by the update date/time.

File name	Date / Time
000117_061128_145856.DAD	06/11/28 15:23
000119_061129_191428.DAD	06/11/29 19:44
000120_061129_194428.DAD	06/11/29 20:14
000121_061129_201428.DAD	06/11/29 20:44
000122_061129_204428.DAD	06/11/29 21:14
000123_061129_211428.DAD	06/11/29 21:44
000124_061129_214428.DAD	06/11/29 22:14
000125_061129_221428.DAD	06/11/29 22:44

Free space 22917 Kbytes

Delete Sort

Pressing the **Sort** key sorts the file list in order from the oldest to newest update date/time, or vice versa. Each time the key is pressed thereafter, the sort order reverses. The arrow next to the **Date/Time** column title indicates ascending or descending order.

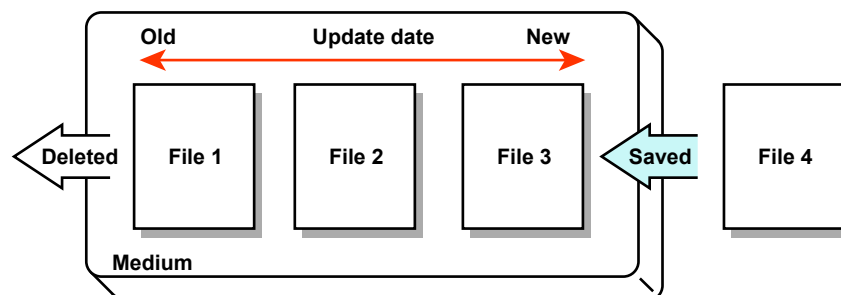
▲ : Sorts from oldest update date/time (ascending)

▼ : Sorts from newest update date/time (descending)

## Storage Method for Constantly Retaining the Most Recent Data Files in the CF Card (Media FIFO)

When saving the data files automatically, you can save the data so that the most recent data files are constantly retained in the CF card. This method allow you to use the DX continuously without having to replace the CF card.

### Operation

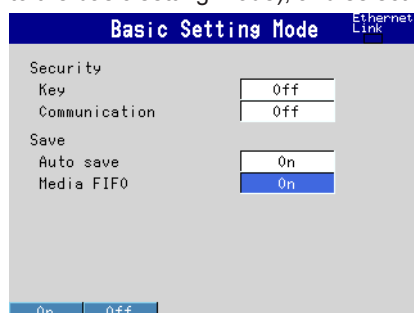


If not enough free space is available when saving a new data file to the CF card, files are deleted in order from the oldest data update date/time to save the new file. This operation is referred to as FIFO (First In First Out).

- The FIFO operation is carried out only when saving the following files automatically. It is not carried out when saving files to the save destination directory using another method.  
Display data files, event data files, report data files, manual sample data files, and snapshot files
- Files that are deleted  
All the files in the save destination directory are applicable to be deleted. However, the following files are excluded.  
Hidden files, read-only files, files in the subdirectory within the save destination directory
- The most recent 1000 files are retained. If the number of files in the save destination directory exceeds 1000, the number of files is held at 1000 by deleting old files even if there is enough free space. If there are more than 1000 files already in the save destination directory, one or more files are always deleted before saving the new file.

### Setup Screen

Press **MENU** (switch to the setting mode), hold down the **FUNC** key for 3 s (switch to the basic setting mode), and select **Environment > Security, Media save**



### Setup Items

Save > Auto save

Select **On**.

Save > Media FIFO

Select **On**.

- ▶ Section 6.2, "Setting the Method for Saving the Data" in the user's manual
- ▶ Operation using communication commands: Page 19

### Status Display of the CF Card

- If an error occurs on the CF card, the CF card icon in the status display section changes to an error display.



(White)

An error occurred while accessing the CF card.



(Light blue)

Detected an error when the CF card was inserted or performed a key operation to eject the CF card when an error was occurring while the CF card was being accessed.

- If the media FIFO is turned ON, the icon does not turn red even when the free space on the CF card falls below 10% of the total CF card size.

▶ Section 1.3, "Display" in the user's manual

### E-mail Transmission of CF Card Errors

- An e-mail message can be sent when an error occurs on the CF card.
- If the media FIFO is turned ON, an e-mail message is not sent even when the free space on the CF card falls below 10% of the total CF card size.

To send e-mail message of CF card errors, set the DX to send a system mail.

#### Setup Screen

Press **MENU** (switch to the setting mode), hold down the **FUNC** key for 3 s (switch to the basic setting mode), and select **Communication (Ethernet) > E-mail**

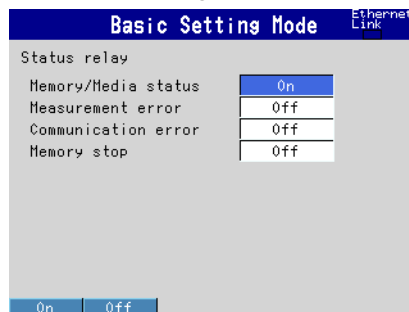
▶ Section 1.4, "Sending E-mail Messages" in the communication interface user's manual

### Relay Contact Output When a CF Card Error Occurs (/F1 and /F2 Options)

A relay contact output can be activated when an error occurs on the CF card.

#### Setup Screen

**MENU** key (switch to the setting mode) > Hold down the **FUNC** key for 3 s (switch to the basic setting mode), and select **Status Relay**



#### Setup Items

Memory/Media status

Select **On**.

▶ Section 2.9, "Outputting the DX Status via the Relay Contact" in the user's manual

### Operation When a CF Card Error Occurs

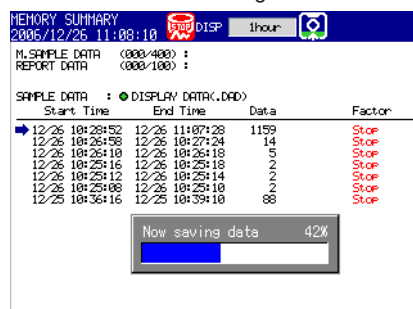
Carry out the procedure below to reset the CF card icon to normal and release the relay output.

- Replace the CF card with a normal one.
- Format the CF card on the DX.

## Progress Display When Saving All Data of the Internal Memory

If you carry out **All Save**\* on the memory summary screen, a pop-up window appears showing the progress of the save operation.

\* Function for saving all data in the internal memory to a CF card or USB flash memory.



### Note

- The pop-up window appears only when the memory summary display is showing.
- If you press the ESC key, the pop-up window clears temporarily and reappears approximately 10 seconds later.
- The time estimate for saving all data is indicated in the table below (when the memory is full of data). It may take longer depending on the operating conditions of the DX.

Save Destination	Time to Save All Data (Estimate)	
	CF Card	USB Flash Memory
Standard memory (internal memory size suffix code -1)	4 minutes	16 minutes
Expansion memory (internal memory size suffix code -2)	10 minutes	40 minutes

- ▶ Section 4.8, "Using the Memory Summary" in the user's manual

## Changing the Initial Display Selection Menu

**SELECT SAVE** and **ALL SAVE** are shown in the initial display menu.

- ▶ Section 4.8, "Using the Memory Summary" in the user's manual
- ▶ Section 5.17, "Changing the FUNC Key Menu and Display Selection Menu" in the user's manual (section 5.18 for the DX2000)

## Improvement to the Data Save Operation to the USB Flash Memory

**Save data** is displayed only when a flash memory is connected to the USB port and is usable\* in the operation mode.

- \* If DX is configured so that any of the items below is shown in the display menu, **Save data** can be executed. You can change the items shown in the display menu using the menu customize function.

**SELECT SAVE, M.SAMPLE SAVE, REPORT SAVE, or ALL SAVE**

- ▶ Section 2.12, "Using the USB Flash Memory (/USB1 Option)" in the user's manual
- ▶ Section 5.17, "Changing the FUNC Key Menu and Display Selection Menu" in the user's manual (section 5.18 for the DX2000)

## Retaining the State of the CapsLock and NumLock Keys on the USB Keyboard

The state of the CapsLock and NumLock keys is retained even if you disconnect the USB keyboard.

- ▶ Section 2.11, "Controlling the DX with a Keyboard (/USB1 Option)" in the user's manual

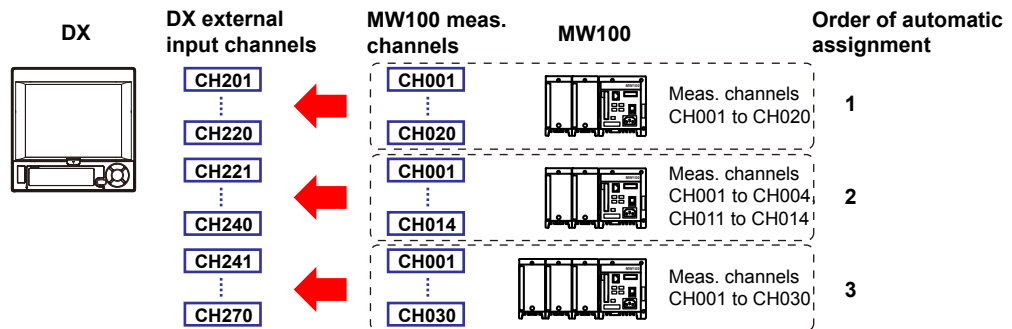


### Setup Items

The MW100 channels are assigned to the external input channels of the DX as follows:

- Channel Number

The channels of the MW100 selected first are assigned consecutively from external input channel 201. The channels of the MW100 selected next are assigned to the available external input channels from the smallest number. You cannot select the external input channels to be assigned.



- Range Settings

The range settings of the MW100 (including the span and unit) are set automatically to the external input channels.

If the span setting of the MW100 range exceeds the span setting range of the DX external input channel (–30000 to 30000), it is set to the span upper limit (30000) or lower limit (–30000).

Specify the settings such as the alarm, tag, and the area display of the color scale band of each channel after the auto setting is complete.

### Note

#### Precautions When Assigning Channels to the External Input Channels

- The MW100 channels are assigned in unit of 10 channels to the external input channels. If the MW100 measurement module consists of less than 10 channels, "OFF" is assigned to the external input channels for the section without channels.
- An error occurs if the number of MW100 channels to be automatically set is greater than the number of available external input channels.
- If the range setting of a MW100 channel is set to "SKIP," the external input channel of the DX is set to "OFF."
- If a MW100 unit contains a module that cannot be set automatically, only the channels that can be assigned are assigned to the external input channels of the DX.
- If a new MW100 is added, auto setting is executed again. At this point, all the settings are cleared. Therefore, you must execute the auto setting again for all MW100s.
- If you are connecting MW100s that can be automatically set and MW100s that cannot be automatically set or other Modbus devices, automatically set the MW100s that can be automatically set first and then manually set the connection of the remaining devices.



**Note****About the MW100**

- MW100s that support auto setting are those with firmware version R2.22 or later.
- MW100 modules that can be automatically set are the following input modules.
  - 4-CH, High-Speed Universal Input Module
  - 10-CH, Medium-Speed Universal Input Module
  - 6-CH, Medium-Speed Four-Wire RTD Resistance Input Module
  - 10-CH, High-speed Input Module
- If there are no channels to be assigned or the Modbus server setting is OFF, auto setting fails with an error. Check the settings.
- MW100s that are connected through auto setting automatically switches to the measurement mode.
- Port number 34324 of the MW100 is used to perform auto setting.
- For details on the MW100 settings, see the user's manual of the MW100.

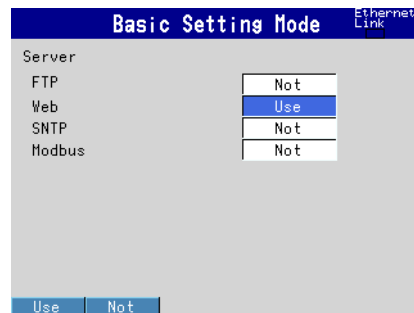
The first channel information of the MW100 that is automatically set to the external input channel can be displayed when the cursor is on the first or last channel.

In addition, the status of the connected MW100 can be confirmed on the Modbus status display screen.

No.	Status	Comm. Data	Server name	Registers
		First	Last	
1	READ	201	220	192.168.1.101
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

## Changing of the Default Setting of the Web Server Function

The default setting of the Web server function has been changed to **Use**. You can use the Web server function by setting the monitor page or operator page to **On**.



► Section 1.5, "Monitoring the DX on a PC Browser" in the communication interface user's manual

## A List of Added Messages

The following error messages have been added.

Code	Message	Explanation/Countermeasures/Ref. section
129	IP address is not set.	Set the IP address of the DX.
131	You have exceeded the available channel capacity.	You cannot connect more than 240 channels.
132	You have exceeded the available number of commands.	The maximum number of commands that can be sent is 16. The modules that can be set with a single command are consecutive modules that can be automatically set. Change the MW100 module configuration so that there are no empty slots.
133	External I/O auto setting information is not available.	Below are the possible causes. Check them. <ul style="list-style-type: none"> <li>• The MW100 is in calibration mode. Change to the setting mode or measurement mode.</li> <li>• The measurement module may not have been detected. Perform system reconfiguration.</li> <li>• There are no modules that can be automatically set. Check the modules.</li> <li>• An IP address has not been assigned to the MW100. Set the IP address.</li> <li>• The Modbus server of the MW100 is turned OFF. Turn ON the server.</li> </ul>
134	Auto setting has already been executed.	You cannot set an MW100 that has been automatically set.
135	External I/O cannot be found.	Check the Ethernet connection.
136	External I/O start cannot be executed.	The current MW100 settings do not allow the measurement to be started. Check the settings.
137	DNS for this device is not set.	Set the DNS of the DX.

In addition, the following status messages have been added. These messages appear when the respective processing operation takes a long time.

Code	Message
513	Post process in progress.
514	Now loading historical data.
515	Data save is completed.
516	Files are now being sorted.

► Section 10.1, "A List of Messages" in the user's manual (section 11.1 for the DX2000)

# Communication Commands

Communication commands are described in chapter 3, "Commands" in the *DX1000/DX1000N/DX2000 Communication Interface User's Manual (IM 04L41B01-17E)*.

## Specifying the Base Position of the Bar Graph

### **SB** Sets the bar graph for each channel

Syntax    SB p1,p2,p3<terminator>  
          p1    Measurement/computation/external input channel number  
          p2    Base position of the bar graph display  
                  NORMAL        Normal (lower limit)  
                  CENTER        Center  
                  LOWER        Lower limit  
                  UPPER        Upper limit  
          p3    Number of scale divisions (4 to 12)

- ▶ Section 3.4, "Setting Commands (Setting)" in the communication interface user's manual
- ▶ Settings on the DX: Page 6

## Storage Method for Constantly Retaining the Most Recent Data Files in the CF Card (Media FIFO)

### **WU** Sets the environment

#### Set the media

Syntax    WU p1,p2,p3<terminator>  
          p1    Setting type (MEDIA)  
          p2    Auto save function (OFF or ON)  
          p3    Media FIFO (OFF or ON)

Example    Use media FIFO.  
            WUMEDIA,ON,ON

- ▶ Section 3.6, "Basic Setting Commands" in the communication interface user's manual
- ▶ Settings on the DX: Page 12

## Format of the File List Output Using the ME Command

Because the method of assigning the file name has been changed, the output format has also changed.

The number of output file name characters is 51.

- Syntax

```
EACRLF
yy/mo/dd_hh:mm:ss_ssssssss_fff..._0_xxx...CRLF
.....
ENCRLF
```

fff... name (51 characters including the extension. If it is less than 48, spaces are entered. If this is a directory, the characters <DIR> are shown at the position displaying the file data size.

- ▶ Section 4.2, "Output Format of ASCII Data" in the communication interface user's manual

## Alarm Output Relay Action When the Alarm ACK Operation Is Executed

### **WO** Set alarm and DO settings

#### Set the Output Relay

Syntax WO p1, p2, p3, p4, p5<terminator>

p1 DO type (RLY)

p2 Relay number

NONE No AND setting

I01 Specify only I01

I01-lxx Specify I01 to lxx

xx={02 to 36}

p3 Energize/De-energize the relay

DE\_ENERGIZE

ENERGIZE

p4 Hold/Not hold the relay

NONHOLD

HOLD

p5 Relay action on ACK

NORMAL

RESET

Example No AND operation of the output relay, relay action is energize, and release the relay output when the alarm ACK operation is performed regardless of the alarm status.

WORLY, NONE, ENERGIZE, HOLD, RESET

- ▶ Section 3.6, "Basic Setting Commands" in the communication interface user's manual
- ▶ Settings on the DX: Page 9

# DAQSTANDARD for DXAdvanced

The functions below have been added or changed since DAQSTANDARD revision 7.21.

## Hardware Configurator

### Setup Menu Corresponding to the DX Functions of Firmware Version 2.0x

- **Specifying the Base Position of the Bar Graph**

Applies to the operations on the [Measure channel], [Math channel], or [Ext channel] tab screen.

Measure channel		Math channel		Ext channel		General setting		Basic Setting	
CH		Scale display position		Scale divide number		Bar display position		Bar divide number	
CH001	1	10	10	Normal	10				
CH002	1	10	10	Normal	10				
CH003	1	10	10	Normal	10				
CH004	1	10	10	Normal	10				

### Bar Display Position

Set the base position of the bar graphs to [Normal], [Center], [Lower], or [Upper].

► Operations on the DX1000/DX1000N/DX2000: Page 6

- **Alarm Output Relay Action When the Alarm ACK Operation Is Executed**

Select [Alarm] on the [Basic Setting] tab screen.

Output relay

Internal Switch AND

Relay AND

Relay action ☐ De-Energize ☒ Energize

Relay hold ☒ Unhold ☐ Hold

Relay Action on ACK ☒ Normal ☐ Reset

### Relay Action on ACK

**Normal** The relay output is deactivated when the alarm ACK operation is executed.

If the condition for activating the alarm output relay is met in the next scan interval, the relay output is activated.

This operation is valid only when the alarm output relay is set to [Hold].

**Reset** The relay output is deactivated when the alarm ACK operation is executed. If a new condition for activating the alarm output relay, the relay is activated.

► Operations on the DX1000/DX1000N/DX2000: Page 9

- **Storage Method for Constantly Retaining the Most Recent Data Files in the CF Card (Media FIFO)**

Select [Environment] > [Detail Setting] on the [Basic Setting] tab screen.

Input/Output

Scale over ☐ Free ☒ Over

Alarm No Logging ☒ OFF ☐ ON

Key Security ☒ OFF ☐ Keylock ☐ Login

Comm. Security ☒ OFF ☐ Login

Auto Save ☐ OFF ☒ ON

Media FIFO ☒ OFF ☐ ON

### Media FIFO

This is valid only when [Auto Save] is [ON].

**ON** If there is no more free space on the CF card, the oldest file is deleted, and the newest file is saved.

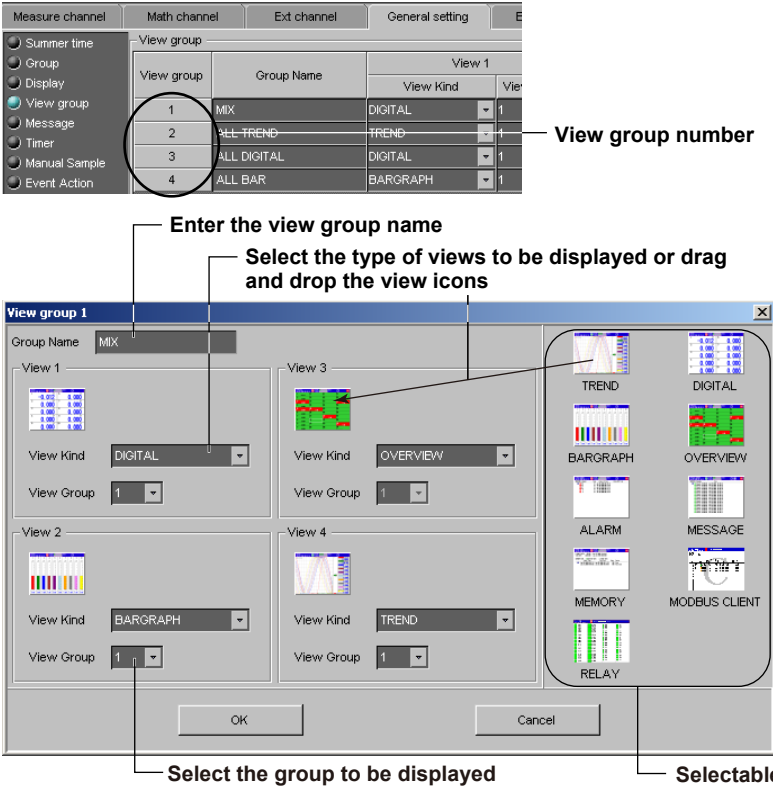
**OFF** If there is no more free space on the CF card, the measured data is not saved to the CF card.

► Operations on the DX1000/DX1000N/DX2000: Page 12

**Dialog Box for Setting the Display Type for Each View Group**

Select [View group] on the [General Setting] tab screen.

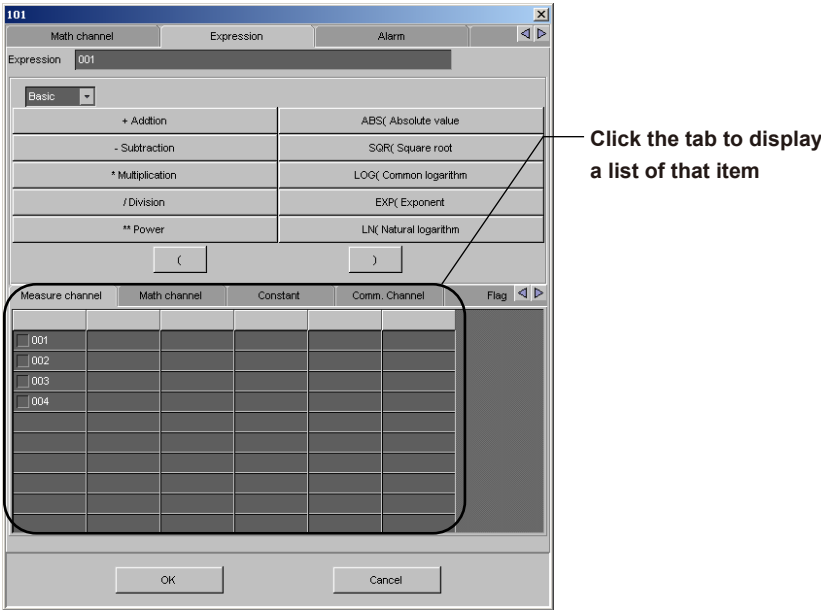
Double-click the view group number to display a dialog box for setting each group.



► Section 3.5, "Entering General Settings" in the DAQSTANDARD for DXAdvanced User's Manual

**Setting the Expression**

This applies to the operation for setting the expression on the setup screen of each computation channel. You can display a list of variables and constants and click the desired variables or constants to create the expression.



► Section 3.4, "Setting the Computation Channels" in the DAQSTANDARD for DXAdvanced User's Manual

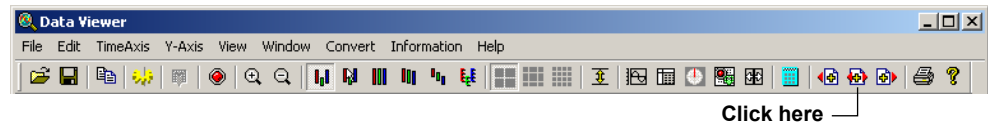
## Viewer

### Linking the Previous and Subsequent Files Collectively

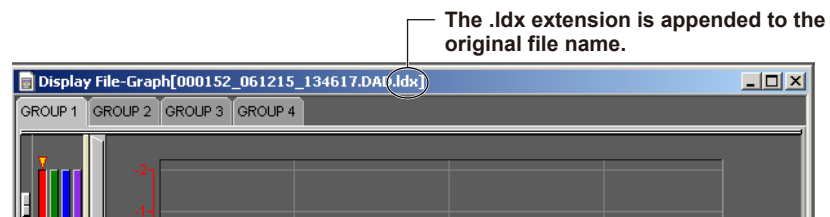
You can collectively link previous and subsequent files to the working file. Up to now, the previous or subsequent file could be linked separately.

Carry out the following procedure with the file opened.

- **Operation on the Toolbar**



All linkable files are linked and displayed.



- **Operation from the Menu Bar**

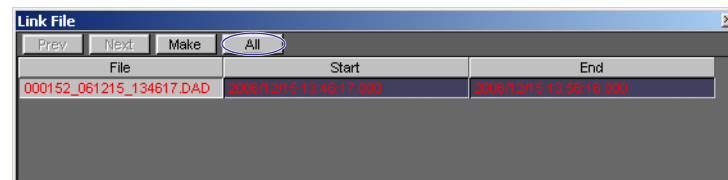
On the [File] menu, click [Link All Files].

All linkable files are linked and displayed.

- **Operation on the Link File Dialog Box**

On the [Window] menu, click [Link].

The [Link File] dialog box opens.



Click [All].

All linkable files are linked and displayed.

- ▶ Section 4.5, "Linking Files and Saving the Link Settings File" in the DAQSTANDARD for DXAdvanced User's Manual